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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,582	07/31/2003	Laurens Wolters	71358-0052	1581
20915	7590	02/03/2006	EXAMINER	
MCGARRY BAIR PC 171 MONROE AVENUE, N.W. SUITE 600 GRAND RAPIDS, MI 49503			PHAN, THIEM D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,582

Applicant(s)

WOLTERS, LAURENS

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/23/04 & 12/3/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II, Claims 12-20, filed on 12/09/06 is acknowledged.

The Restriction mailed on 11/09/05 has been carefully reviewed and is held to be proper. Applicant did not distinctly and specifically point out any logical error in the Restriction Requirement. Moreover, due to the lack of traversal on the merits, Applicant's election of Group II, claims 12-20, has been treated as an election without traverse.

Accordingly, Claims 1-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim.

The Restriction filed on 11/09/05 is hereby **made Final**.

Applicant is required to cancel these nonelected claims (1-11) or take other appropriate action. An Office Action on the merits of Claims 12-20 now follows.

Specification

2. The disclosure and claims are objected to because of the following informalities: the font size is beyond an adequate range. See 37 CFR 1.52(b)(2)(ii). Appropriate correction is required.

Title

3. The following title is suggested: “Method of Forming a Winding Core for an Electric Motor”.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**hollow cylindrical jig**” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable by Kanno (US 5,255,425) in view of Meacham et al (US 6,122,817).

As applied to claim 12, Kaano teaches a method of manufacturing laminated core, comprising:

- providing a hollow cylindrical jig (Fig. 2B, 74) having at least one guide or edge-fit (Fig.

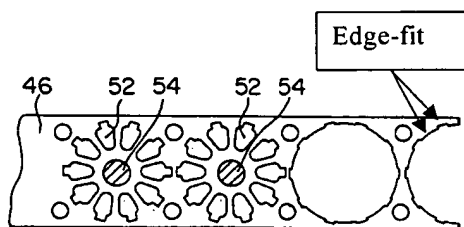
2A, see below) to fit the lamination;

- providing plates or laminations (Fig. 3B, 42), each having a central opening, radial poles with caps at the end of each pole, and having a guide or edge-fit (Fig. 2A, see below) corresponding in shape to mate with the at least one guide in the jig;
- providing a stop (Fig. 2B, below 42) in a jig;
- sliding each plate (Fig. 2B, 42) in the jig with the guide in the plate mating with the guide in the jig, and with the first plate bearing against the stop until a plurality of plates are disposed in the jig;
- pressing a shaft into the central openings (Fig. 3C, 44).

Meacham et al teach a process of stacking lamination core, comprising:

- compressing the plates (Col. 2, lines 50-59) to form a lamination; and
- securing a lock nut or clamping assembly (Fig. 1, 16) with the threaded end caps (Fig. 1, 20b) on the shaft adjacent to the last plate to hold the lamination in compression.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the pressing and securing steps of the lamination, as taught by Meacham et al, to the method of manufacturing laminated core of Kaano, in order to reinforce the strength of the laminated core.



As applied to claim 13, Kanno teaches that the guide or edge-fit (Fig. 2A, see above) in the jig (Fig. 2B, 74) is an axial rib and the guide in each plate is a notch.

As applied to claim 14, Meacham et al teach that a spacer (Fig. 1, 22a or 22b) is disposed at each end of the lamination.

As applied to claims 15 and 16, Kanno and Meacham et al teach a process of manufacturing laminated core including a jig (Kanno; Fig. 2B, 74) with a longitudinal axis and a guide or edge fit, which reads on applicant's claimed invention, except for having the guide axially disposed at an acute angle of 10 degree relative to the longitudinal axis for skewing.

At the time the invention was made, it would have been an obvious of design choice to a person of ordinary skill in the art to have the guide axially disposed at an acute angle relative to the longitudinal axis for skewing because applicant has not disclosed that having the guide axially disposed at an acute angle relative to the longitudinal axis for skewing provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicants' invention to perform equally well with non-skewed guide or edge-fit because it would help maintaining the lamination in the hollow cylindrical jig.

Therefore, it would have been an obvious matter of design choice to modify Kanno to obtain the invention as specified in the claim.

As applied to claim 17, Meacham et al teach that the compressing step and the pressing step occur simultaneously (Col. 2, lines 50-55).

As applied to claim 18, Meacham et al teach that the lock nut is threaded onto the shaft with sufficient torque to hold the lamination in compression.

As applied to claim 19, Kanno and Meacham et al teach a process of manufacturing laminated core including a slot (Kanno; Fig. 3B, 52) for winding, which reads on applicant's claimed invention, except for having the step of wrapping wire around the radial poles.

It would be obvious to one of ordinary skill in the art at the time the invention was made to wrap wire around the radial poles in order to make a dynamo-electric machine.

As applied to claim 20, Kanno and Meacham et al teach a process of manufacturing laminated core including a clamping assembly (Meacham et al; Fig. 1, 16) with the threaded end caps (Meacham et al; Fig. 1, 20b) on the shaft adjacent to the last plate to hold the lamination in compression, which reads on applicant's claimed invention, except for having the plates being compressed by hydraulic press.

At the time the invention was made, it would have been an obvious of design choice to a person of ordinary skill in the art to have the plates being compressed by hydraulic press because applicant has not disclosed that having the plates being compressed by hydraulic press provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in

the art, furthermore, would have expected applicant's invention to perform equally well with clamping assembly with the threaded end caps because it would help securing the lamination core in a compact system.

Therefore, it would have been an obvious matter of design choice to modify Meacham et al to obtain the invention as specified in the claim.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

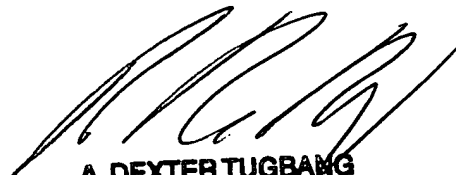
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan
Examiner
Art Unit 3729

tp
February 1, 2006



**A. DEXTER TUGBANG
PRIMARY EXAMINER**